HABITAT RELATIONSHIPS NOTES

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HABITAT CAPABILITY MODELING IN THE SOUTHERN REGION

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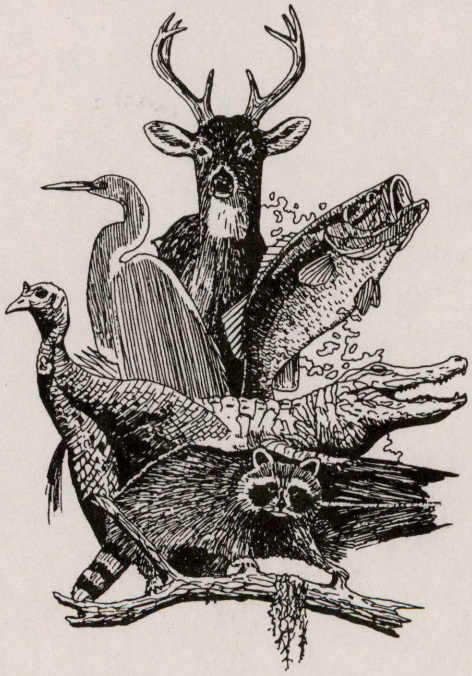


USDA Forest Service
Southern Region
Fisheries, Wildlife, and Range

"Habitat Relationships: Providing the tools for sound wildlife and fish decisions"

INTRODUCTION

Basics

Habitat capability modeling provides a prediction (mathematically or in words) of a geographic area's ability to support animal populations based on environmental conditions (e.g., current habitat attributes and effects of management activities).

This prediction is based on measured parameters (such as forest type and age class) and biological knowledge of a species.

Models are incomplete if they fail to address factors which limit (or control) populations (e.g. black bear, when poaching from open roads has a significant effect).

Why Model ?

Improved Decision-Making: Models help us better analyze and display the effects of various management alternatives at the project level. They provide a predictive monitoring tool.

Improved Public Acceptance: Models help us demonstrate to the public that our analyses are more than "best estimates".

Improved Accountability: Models are a valuable tool for TSPIRS report generation and analysis of economic effects.

Improved Forest Planning: Models are useful for FLRMP level analysis and may be integrated with FORPLAN.

Types of Models

Index (HSI): Habitat Suitability Index (USFWS Blue Books). Uses mathematical formulas based on key habitat elements. Output is an index 0f 0-1.0.

Pattern Recognition (PATREC): Uses information on the occurence of specific habitat characteristics in an area.

Coefficient (HABCAP): Displays capability (in numbers of animal habitat units) as predicted from known or anticipated habitat conditions.

GIS: GIS models can use any of the above models as well as incorporating complex spatial relationships.

COMPATS: An umbrella program which runs several models including wildlife, sediment, economics, and timber. In Region 8, COMPATS was first used on the Chattahoochee NF where Marisue Hillard, Eddie Morris, and Ben Sanders developed and implemented the CHABCAP model. A new regional version of COMPATS developed by Dan Keller is currently set up primarily for the running of HABSIM (HABCAP models). Other models in this new COMPATS version have not been thoroughly tested.

COMPATS uses HABCAP type models since they can run with stand-level data input from the Continuous Inventory of Stand Condition (CISC). HSI models are not used because they generally require information that is not available in CISC.

Habitat and non-habitat factors can be combined in the same model. The current version of HABSIM, however does not do this, even though COMPATS provides data entry for road information.

Some simple GIS models (red-cockaded woodpecker and gopher tortoise) have been developed for use in Florida but are not part of the COMPATS package which can run with or without a link to GIS.

APPLICATIONS

Accuracy

Accuracy of a model depends on the level of our **biological knowledge** of a species is, whether or not the **appropriate data** are available for input, and the **accuracy** of those data.

Coefficient Development

HABSIM must be customized by each forest with an appropriate set of coefficients. If the forest has been using an older version of HABCAP, the same ones may be used. Forests which have not developed coefficients must do so. Coefficients are assigned by: 1)**working group**, with associated forest types, 2)**wildlife species** to be modeled, 3)**stand age** class. The 16 age classes are: 0-5, 6-10, 11-20, 21-30, 31-40, 41-50, 51-60, 61-70, 71-80, 91-100, 101-110, 111-120, 121-130, 131-140, and 141+ years. Outputs are not limited to animal species. Pounds of mast or browse per acre or even livestock "head months" can be predicted.

Values are also assigned for number of WFUDS/species and dollar value/WFUD (from RPA).

How Does HABSIM Work?

The functioning of the models is fairly simple and straightforward. Basically, after stand ages and working groups (forest types) are entered manually or automatically from CISC, the model multiplies coefficients by the stand acreage, adds up the totals and spits out a total estimate of habitat capability in "habitat capability units" for each species modeled. It is useful to think of these units as representing the number of animals that theoretically could be supported by the habitats being analyzed.

Neither the size nor relative percentages of stands in each age class are considered. Limiting factors such as availability of water and other habitat elements are also ignored. These factors are dealt with by constraints that are external to the model (e.g. Forest Plan standards and guides which govern clearcut spacing and acreage).

Assumptions

When information on key habitat elements (such as snags for bluebirds) is not available in CISC, assumptions about average conditions for a given forest type/age class must be factored into the coefficients.

Since the models do not consider limiting factors, an additional assumption is made that external controls (e.g. standards and guides which limit the percentage of early-successional stage habitat in an area) will be present.

We also assume that habitat conditions will be relatively stable during the 5 or 10 year period before the next age class.

Most importantly, outputs from the models should not be viewed as absolute predictions of animal populations. Rather, they are estimates of habitat capability, useful for comparing alternative sets of treatments **relative** to other alternatives.

Comparing dollars generated from WFUDS calculated for each alternative is particularly misleading and inappropriate. Normally, these values should be displayed only for large-scale analysis such as forest-level TSPIRS runs.

These assumptions illustrate the importance of having a biologist run the models and interpret the results. All biological models have technical strengths and limitations which need to be considered in the context of each specific application.

Factors of Scale

Models are not particularly good at making site-specific predictions. More appropriately, they are best used at the "analysis area" scale. In the past, we have generally found it convenient to analyze a compartment or cluster of compartments. While analysis areas of this size (800-5,000 ac.) are appropriate for species with small home ranges such as deer and turkey, they are not appropriate for species such as black bear. Biological considerations, rather than administrative boundaries should be used when establishing analysis areas.

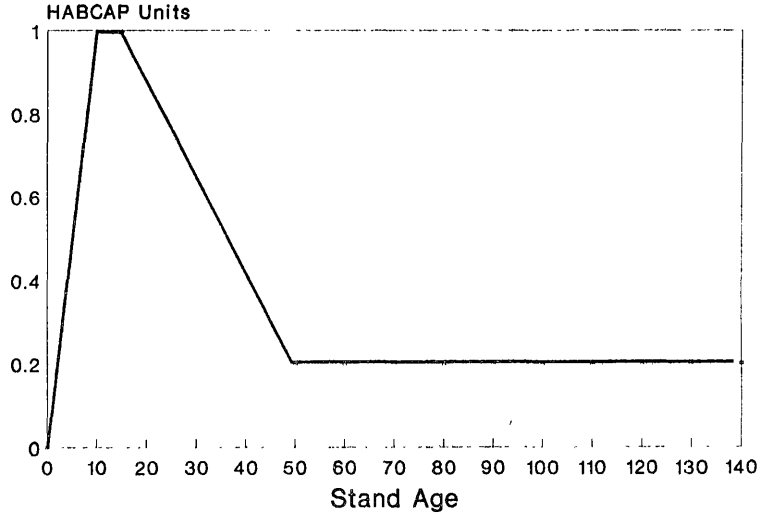
Informed Consent

Until recently, little outside attention was focused on the specific details of our model development and use. Today, analysis tools such as habitat capability models are subjected to increasing scrutiny from the general public, the scientific community, and other resource agencies. Forests that have not yet developed coefficients should give serious consideration to involving species experts outside the agency when determining response curves for each species. It is important to document the research and rationales used to develop the curves. Jessie Overcash, on the Jefferson NF is a good source of information on making this process work successfully.

When developing curves, concentrate on relative importance of a given point on the curve, rather than actual animal numbers. Maximum density (1.0) on the curve should be defined as the greatest number of animals that could be sustained by a working group over a period time, assuming that habitat is the limiting factor. For game species, maximum densities should represent pre-hunting season populations. Note that the example curve which follows displays relative densities. Coefficients for HABSIM are derived by multiplying these numbers by a factor which represents the actual animal number represented by maximum density.

EXAMPLE

Response Curve for *GROUSE*
Working Group *A,C, D, E, G*
Cuttenrun National Forest



Narrative: Younger stands provide best brood cover. After stands reach 13 years of age, their value is considered to decline steadily until 50 years. Beyond that point they are considered of low value.

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Newt Perspectives, Prof. of Underwater Basket Weaving, Univ. of Outer Mongolia

References: (Attached)

Customizing the Models

Various versions of HABCAP have been in use on forests around the Southern Region. Some, such as the Ouachita version, have been considerably modified from the generic HABCAP. HABSIM set-up menus provide for a fair degree of freedom in customizing the models for each forest. Options include, adding species, coefficient table set-up for working group/age classes, coefficient tables for treatments, provision for coefficients derived from a one-time treatment (such as waterhole construction), assignment of a "life-span" for treatments such as prescribed burning, and values for WFUDS/animal and dollars/WFUD.

Further customization may require modification of the FORTRAN source code. Each forest is free to modify the FORTRAN code to fit their needs, but in doing so, they assume responsibility for compatibility with future releases of COMPATS. Forests should contact the Regional Wildlife and Fish Habitat Relationships Coordinator (Jim Fenwood) for assistance with set-up or modifications. Chris Frye, NFs in Mississippi, and Eddie Morris, Chattahoochee/Oconee NFs, are good information sources as well.

The Analysis Framework

The appropriate framework for objective-setting and analysis is the key to making effective use of the HABSIM models. Steps in the process should include:

1. Identifying issues
2. Selecting indicators (species or communities of species) to represent these issues
3. Setting of objectives for each indicator based on FLRMP "desired future conditions"
4. Determination of current habitat capability
5. Analysis of future habitat capability under each alternative
6. Selection of an alternative based on how well objectives for indicators are met

EXAMPLE

MANAGEMENT INDICATORS
ALDO LEUPOLD RANGER DISTRICT
COMPARTMENT 22

INDICATORS	CATEGORY	ISSUE	SOURCE	FLRMP OBJECTIVE
E. Wild Turkey	Featured Game	Demand, Mast Production	FLRMP & Local	Increase
W.T. Deer	Game	Demand, Mast Production	FLRMP & Local	Maintain Current Levels
Pil. Woodpecker	Ecological Indicator	Old-growth	FLRMP	Maintain Viability
Gray Squirrel	Ecological Indicator/ Game	Mature Bottom Land Hardwood, Demand	FLRMP	Maintain Current Levels
Yl. breasted Chat	Ecological Indicator	Shrub Hardwood	FLRMP	Maintain Viability
E. Bluebird	Ecological Indicator	Grass/forb, Cavities	FLRMP	Maintain Viability
Bobwhite Quail	Game	Demand	FLRMP	Maintain or Increase
Longleaf/ Wiregrass Community	Ecological Indicator	Unique Ecosystem	FLRMP & Local	Restore
Mayaca Abletii	Sensitive Species	Swamp Habitat	FLRMP	Increase
Sculpin	Ecological Indicator	Warm Water Streams	FLRMP	Maintain Current Levels

Species or species associations should be selected according to issues identified. For example, if habitat fragmentation is an issue, select a forest interior species. Selection of indicators should not be limited to FLRMP Management Indicator Species (MIS) if other indicators are more appropriate. If "mountaintop balds" is an issue, for example, consider using "mountaintop bald plant community" as an indicator.

Models alone can not do this job! Currently, HABSIM models are not available for many species. Furthermore, models do not consider all factors that influence animal populations. The preceding example illustrates how a range of indicators might be used to represent issues for a particular project. Such a table could be included in the "Environmental Consequences" section of an environmental analysis. Models would serve as only one tool in the analysis and comparison of alternatives. Results of this analysis should be displayed in both tabular and narrative form. Displaying the actual model output numbers in the final document is optional. **Simply providing model output tables without the rest of the process is unacceptable.**

Of course, anyone can plug numbers into HABSIM and produce output. It falls to the biologist to interpret the results in a way that is consistent with biological realities and the strengths and weaknesses of the modeling system.

CLOSING THOUGHTS

HABSIM has been designed with the user in mind. If you can suggest ways that it can better meet your needs, please let us know. Future enhancements are already in the planning stages but we are depending on you to help us design tomorrow's products.

APPENDIX

HABSIM Coefficients

Reg. 8 CHHABCAP2 Program

Appendix B: Wildlife Habitat Response Coefficients

Table 1a: Number of **Deer** per Acre by Working Group* and Age Class- **Untreated**

	Age Class															
	0 - 5	6 - 10	11- 20	21- 30	31- 40	41- 50	51- 60	61- 70	71- 80	81- 90	91- 100	101- 110	111- 120	121- 130	131- 140	141+
YelPn	.165	.000	.000	.022	.022	.022	.022	.022	.022	.022	.022	.022	.022	.022	.022	.500
WhPn	.165	.000	.000	.011	.011	.011	.011	.011	.011	.011	.011	.011	.011	.011	.011	.300
VirPn	.120	.000	.000	.016	.016	.016	.016	.016	.016	.016	.016	.016	.016	.016	.016	.500
MxHw	.150	.000	.000	.020	.020	.020	.020	.020	.020	.020	.020	.020	.020	.020	.020	.300
BotHw	.164	.000	.000	.022	.022	.022	.022	.022	.022	.022	.022	.022	.022	.022	.022	.300
CvHw	.164	.000	.000	.022	.022	.022	.022	.022	.022	.022	.022	.022	.022	.022	.022	.300
UpHw	.150	.000	.000	.020	.020	.020	.020	.020	.020	.020	.020	.020	.020	.020	.020	.300

Table 1b: Number of **Additional Deer** per Acre by Working Group and **Type of Treatment**

	Working Group						
Treatment	Yellow Pn	White Pn	Virg Pn	Mixed Hdwd	Botlnd Hdwd	Cove Hdwd	Upl Hdwd
Thinned	.013	.013	.009	.012	.013	.013	.012
Burned	.022	.022	.016	.020	.022	.022	.020

*YelPn (Yellow Pine) CISC Codes- 22,31,32,38,39
WhPn (White Pine) CISC Codes- 3,4,5
VirPn (Virginia Pine) CISC Codes- 33
MxHw (Mixed Hardwood) CISC Codes- 8,9,10,11,12,13,14,15,16,17,18,19,20,40,41,42,43,44,45,46,47,48,49
CvHw (Cove Hardwood) CISC Codes- 46,50,55,56,58,61,62,63,64,65,68,69,71,72,73,75,76
UpHw (Upland Hardwood) CISC Codes- 51,52,53,54,57,59,60,82

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Table 2a: Number of **Turkey** per Acre by Working Group and Age Class- **Untreated**

	Age Class															
	0 - 5	6 - 10	11- 20	21- 30	31- 40	41- 50	51- 60	61- 70	71- 80	81- 90	91- 100	101- 110	111- 120	121- 130	131- 140	141+
Yelpn	.011	.000	.000	.032	.032	.032	.032	.032	.032	.032	.032	.032	.032	.032	.032	.032
WhPn	.012	.000	.000	.016	.016	.016	.016	.016	.016	.016	.016	.016	.016	.016	.016	.016
VirPn	.012	.000	.000	.005	.005	.005	.005	.005	.005	.005	.005	.005	.005	.005	.005	.005
MxHw	.012	.000	.000	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050
BotHw	.012	.000	.000	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050	.050
CvHw	.011	.000	.000	.036	.036	.036	.036	.036	.036	.036	.036	.036	.036	.036	.036	.036
UpHw	.011	.000	.000	.045	.045	.045	.045	.045	.045	.045	.045	.045	.045	.045	.045	.045

Table 2b: Number of **Additional Turkey** per Acre by Working Group and **Type of Treatment**

	Working Group						
Treatment	Yellow Pn	White Pn	Virg Pn	Mixed Hdwd	Botlnd Hdwd	Cove Hdwd	Upl Hdwd
Thinned	.002	.002	.002	.002	.002	.002	.002
Burned	.020	.020	.020	.020	.020	.020	.020

Table 3a: Number of **Squirrel** per Acre by Working Group and Age Class- **Untreated**

	Age Class															
	0 - 5	6 - 10	11- 20	21- 30	31- 40	41- 50	51- 60	61- 70	71- 80	81- 90	91- 100	101- 110	111- 120	121- 130	131- 140	141+
YelPn	.000	.000	.000	.000	.000	.120	.120	.180	.180	.180	.180	.240	.240	.240	.240	.240
WhPn	.000	.000	.000	.000	.000	.030	.030	.075	.075	.075	.075	.080	.080	.080	.080	.080
VirPn	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
MxHw	.000	.000	.000	.000	.000	.330	.330	.495	.495	.495	.495	.660	.660	.660	.660	.660
BotHw	.000	.000	.000	.000	.000	.300	.300	.450	.450	.450	.450	.600	.600	.600	.600	.600
CvHw	.000	.000	.000	.000	.000	.270	.270	.324	.324	.324	.324	.540	.540	.540	.540	.540
UpHw	.000	.000	.000	.000	.000	.300	.300	.450	.450	.450	.450	.600	.600	.600	.600	.600

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Table 3b: Number of **Additional Squirrel** per Acre by Working Group and **Type of Treatment**

Treatment	Working Group						
	Yellow Pn	White Pn	Virg Pn	Mixed Hdwd	Botlnd Hdwd	Cove Hdwd	Upl Hdwd
Thinned	.037	.037	.000	.037	.037	.037	.037

Table 4a: Number of **Grouse** per Acre by Working Group and Age Class- **Untreated**

	Age Class															
	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	111-120	121-130	131-140	141+
YelPn	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
WhPn	.000	.125	.125	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.500
VirPn	.000	.125	.125	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.500
MxHw	.000	.125	.125	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.500
BotHw	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
CvHw	.000	.125	.125	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.500
UpHw	.000	.125	.125	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.500

Table 4b: Number of **Additional Grouse** per Acre by Working Group and **Type of Treatment**

Treatment	Working Group						
	Yellow Pn	White Pn	Virg Pn	Mixed Hdwd	Botlnd Hdwd	Cove Hdwd	Upl Hdwd
Thinned	.000	.150	.000	.150	.000	.150	.150
Burned	.000	.137	.000	.137	.000	.137	.137

Table 5a: Pounds of **Browse** per Acre by Working Group and Age Class- **Untreated**

	Age Class															
	0 - 5	6 - 10	11- 20	21- 30	31- 40	41- 50	51- 60	61- 70	71- 80	81- 90	91- 100	101- 110	111- 120	121- 130	131- 140	141+
elPn	184.	184.	4.00	7.00	9.00	12.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
hPn	202.	202.	4.00	7.00	11.0	14.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
irPn	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
xHw	122.	122.	4.00	8.00	12.0	15.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
otHw	202.	202.	4.00	7.00	11.0	14.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
vHw	202.	202.	4.00	7.00	11.0	14.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
pHw	122.	122.	4.00	8.00	12.0	15.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0

Table 5b: Pounds of **Browse** per Acre by Working Group and Age Class- **Thinned**

	Age Class															
	0 - 5	6 - 10	11- 20	21- 30	31- 40	41- 50	51- 60	61- 70	71- 80	81- 90	91- 100	101- 110	111- 120	121- 130	131- 140	141+
elPn	.000	.000	78.0	66.0	56.0	49.0	43.0	40.0	36.0	32.0	28.0	28.0	28.0	28.0	28.0	28.0
hPn	.000	.000	600.	80.0	67.0	59.0	52.0	48.0	43.0	39.0	34.0	34.0	34.0	34.0	34.0	34.0
irPn	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
xHw	.000	.000	78.0	66.0	56.0	49.0	43.0	40.0	36.0	32.0	28.0	28.0	28.0	28.0	28.0	28.0
otHw	.000	.000	600.	80.0	67.0	59.0	52.0	48.0	43.0	39.0	34.0	34.0	34.0	34.0	34.0	34.0
vHw	.000	.000	600.	80.0	67.0	59.0	52.0	48.0	43.0	39.0	34.0	34.0	34.0	34.0	34.0	34.0
pHw	.000	.000	78.0	66.0	56.0	49.0	43.0	40.0	36.0	32.0	28.0	28.0	28.0	28.0	28.0	28.0

Table 5c: Pounds of **Browse** per Acre by Working Group and Age Class- **Burned**

	Age Class															
	0 - 5	6 - 10	11- 20	21- 30	31- 40	41- 50	51- 60	61- 70	71- 80	81- 90	91- 100	101- 110	111- 120	121- 130	131- 140	141+
elPn	155.	132.	113.	98.0	86.0	79.0	72.0	64.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
hPn	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
irPn	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
xHw	155.	132.	113.	98.0	86.0	79.0	72.0	64.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
otHw	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
vHw	155.	132.	113.	98.0	86.0	79.0	72.0	64.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
pHw	155.	132.	113.	98.0	86.0	79.0	72.0	64.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0

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Table 6: Number of **Cavity Nesters** per Acre by Working Group and Age Class- **Untreated**

	Age Class															
	0 - 5	6 - 10	11- 20	21- 30	31- 40	41- 50	51- 60	61- 70	71- 80	81- 90	91- 100	101- 110	111- 120	121- 130	131- 140	141+
elPn	.026	.026	.015	.011	.034	.055	.087	.087	.116	.124	.124	.124	.124	.124	.124	.124
hPn	.002	.003	.014	.007	.015	.038	.072	.080	.087	.090	.092	.092	.092	.092	.092	.092
irPn	.002	.003	.014	.007	.015	.038	.072	.080	.087	.090	.092	.092	.092	.092	.092	.092
xHw	.027	.027	.035	.011	.036	.067	.122	.133	.156	.156	.156	.156	.156	.156	.156	.156
otHw	.045	.045	.035	.011	.042	.068	.120	.140	.160	.163	.165	.165	.165	.165	.165	.165
vHw	.027	.027	.035	.011	.036	.067	.122	.133	.156	.156	.156	.156	.156	.156	.156	.156
pHw	.027	.027	.035	.011	.036	.067	.122	.133	.156	.156	.156	.156	.156	.156	.156	.156

Table 7: Pounds of **Hard Mast** per Acre by Working Group and Age Class- **Untreated**

	Age Class															
	0 - 5	6 - 10	11- 20	21- 30	31- 40	41- 50	51- 60	61- 70	71- 80	81- 90	91- 100	101- 110	111- 120	121- 130	131- 140	141+
elPn	.000	.000	.000	6.64	12.8	18.9	21.6	22.1	22.6	23.9	25.7	25.7	25.7	25.7	25.7	25.7
hPn	.000	.000	.000	13.3	25.5	37.7	43.2	44.2	45.1	47.7	51.4	51.4	51.4	51.4	51.4	51.4
irPn	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
xHw	.000	.000	.000	49.8	95.3	142.	162.	166.	170.	179.	193.	193.	193.	193.	193.	193.
otHw	.000	.000	.000	66.4	127.	189.	216.	221.	226.	239.	257.	257.	257.	257.	257.	257.
vHw	.000	.000	.000	19.9	38.2	56.6	64.8	66.2	67.7	71.6	77.1	77.1	77.1	77.1	77.1	77.1
pHw	.000	.000	.000	66.4	127.	189.	216.	221.	226.	239.	257.	257.	257.	257.	257.	257.

Table 8: Number of **Dens** per Acre by Working Group and Age Class- **Untreated**

	Age Class															
	0 - 5	6 - 10	11- 20	21- 30	31- 40	41- 50	51- 60	61- 70	71- 80	81- 90	91- 100	101- 110	111- 120	121- 130	131- 140	141+
elPn	.000	.000	.000	.100	.100	.400	.400	.750	.750	.750	.750	.800	.800	.800	.800	.800
hPn	.000	.000	.000	.100	.100	.400	.400	.750	.750	.750	.750	.800	.800	.800	.800	.800
irPn	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
xHw	.000	.000	.000	.700	.700	4.10	4.10	7.50	7.50	7.50	7.50	7.80	7.80	7.80	7.80	7.80
otHw	.000	.000	.000	.700	.700	4.10	4.10	7.50	7.50	7.50	7.50	7.80	7.80	7.80	7.80	7.80
vHw	.000	.000	.000	.700	.700	4.10	4.10	7.50	7.50	7.50	7.50	7.80	7.80	7.80	7.80	7.80
pHw	.000	.000	.000	.700	.700	4.10	4.10	7.50	7.50	7.50	7.50	7.80	7.80	7.80	7.80	7.80

HABCAP Coefficients, NF's in Mississippi (MSHABCAP3, March 1991)

AGE CLASS -->	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	111-120	121-130	131-140	141 +
BROWSE (Untreated) lbs/ac																
Slash Pine	184.	184.	4.00	7.00	9.00	12.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
Yellow Pine	202.	202.	4.00	7.00	11.0	14.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Longleaf Pine	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Mixed Hdwd/Pine	122.	122.	4.00	8.00	12.0	15.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
Hdwd GM PU *	202.	202.	4.00	7.00	11.0	14.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Hdwd GM GU *	202.	202.	4.00	7.00	11.0	14.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Hdwd PM GU *	122.	122.	4.00	8.00	12.0	15.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0

(* GM PU = Good Mast, Poor Understory, etc.)

BROWSE (Burned) lbs/ac																
Slash Pine	155.	132.	113.	098.	086.	079.	072.	064.	056.	056.	056.	056.	056.	056.	056.	056.
Yellow Pine	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Longleaf Pine	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Mixed Hdwd/Pine	155.	132.	113.	098.	086.	079.	072.	064.	056.	056.	056.	056.	056.	056.	056.	056.
Hdwd GM PU	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Hdwd GM GU	155.	132.	113.	098.	086.	079.	072.	064.	056.	056.	056.	056.	056.	056.	056.	056.
Hdwd PM GU	155.	132.	113.	098.	086.	079.	072.	064.	056.	056.	056.	056.	056.	056.	056.	056.

BROWSE (Thinned) lbs/ac

Slash Pine	.000	.000	78.0	66.0	56.0	49.0	43.0	40.0	36.0	32.0	28.0	28.0
28.0 28.0	28.0	28.0										
Yellow Pine	.000	.000	600.	80.0	67.0	59.0	52.0	48.0	43.0	39.0	34.0	34.0
34.0 34.0	34.0	34.0										
Longleaf Pine	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
.000 .000	.000	0000										
Mixed Hdwd/Pine	.000	.000	78.0	66.0	56.0	49.0	43.0	40.0	36.0	32.0	28.0	28.0
28.0 28.0	28.0	28.0										
Hdwd GM PU	.000	.000	600.	80.0	67.0	59.0	52.0	48.0	43.0	39.0	34.0	34.0
34.0 34.0	34.0	34.0										
Hdwd GM GU	.000	.000	600.	80.0	67.0	59.0	52.0	48.0	43.0	39.0	34.0	34.0
34.0 34.0	34.0	34.0										
Hdwd PM GU	.000	.000	78.0	66.0	56.0	49.0	43.0	40.0	36.0	32.0	28.0	28.0
28.0 28.0	28.0	28.0										

DEER No./ac

Slash Pine	.143	.059	.012	.020	.022	.022	.025	.025	.025	.025	.025	.025
.025 .025	.025	.025										
Yellow Pine	.167	.059	.012	.020	.022	.022	.025	.025	.025	.025	.025	.025
.025 .025	.025	0.25										
Longleaf Pine	.125	.067	.012	.020	.020	.020	.022	.022	.022	.022	.022	.022
.022 .022	.022	.022										
Mixed Hdwd/Pine	.200	.059	.014	.020	.025	.025	.029	.033	.033	.033	.033	.033
.033 .033	.033	.033										
Hdwd GM PU	.200	.050	.017	.020	.025	.029	.033	.050	.050	.050	.050	.066
.066 .066	.066	.066										
Hdwd GM GU	.200	.050	.017	.020	.033	.040	.050	.066	.066	.066	.066	.083
.083 .083	.083	.083										
Hdwd PM GU	.200	.059	.017	.020	.033	.033	.033	.033	.033	.033	.033	.033
.033 .033	.033	.033										

DENS No./ac

Slash Pine	.000	.000	.000	.100	.100	.400	.400	.750	.750	.750	.750	.800
.800	.800	.800	.800									
Yellow Pine	.000	.000	.000	.100	.100	.400	.400	.750	.750	.750	.750	.800
.800	.800	.800	.800									
Longleaf Pine	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
.000	.000	.000	.000									
Mixed Hdwd/Pine	.000	.000	.000	.700	.700	4.10	4.10	7.50	7.50	7.50	7.50	7.80
7.80	7.80	7.80	7.80									
Hdwd GM PU	.000	.000	.000	.700	.700	4.10	4.10	7.50	7.50	7.50	7.50	7.80
7.80	7.80	7.80	7.80									
Hdwd GM GU	.000	.000	.000	.700	.700	4.10	4.10	7.50	7.50	7.50	7.50	7.80
7.80	7.80	7.80	7.80									
Hdwd PM GU	.000	.000	.000	.700	.700	4.10	4.10	7.50	7.50	7.50	7.50	7.80
7.80	7.80	7.80	7.80									

HOODED WARBLER No./ac

Slash Pine	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
.000	.000	.000	.000									
Yellow Pine	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
.000	.000	.000	.000									
Longleaf Pine	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
.000	.000	.000	.000									
Mixed Hdwd/Pine	.000	.000	.000	.000	.000	.100	.100	.130	.130	.130	.130	.130
.130	.130	.130	.130									
Hdwd GM PU	.000	.000	.000	.000	.000	.180	.180	.220	.220	.220	.220	.220
.220	.220	.220	.220									
Hdwd GM GU	.000	.000	.000	.000	.000	.260	.260	.260	.320	.320	.320	.320
.320	.320	.320	.320									
Hdwd PM GU	.000	.000	.000	.000	.000	.260	.260	.320	.320	.320	.320	.320
.320	.320	.320	.320									

PILEATED WOODPECKER No./ac

Slash Pine	.000	.000	.000	.000	.000	.006	.006	.009	.009	.012	.012	.012
.012	.015	.015	.015									
Yellow Pine	.000	.000	.000	.000	.000	.006	.006	.009	.009	.012	.017	.017
.017	.017	.017	.017									
Longleaf Pine	.000	.000	.000	.000	.000	.006	.006	.006	.006	.006	.006	.006
.006	.006	.006	.006									
Mixed Hdwd/Pine	.000	.000	.000	.000	.000	.009	.009	.012	.012	.016	.016	.016

.016	.020	.020	.020									
Hdwd GM PU		.000	.000	.000	.000	.000	.009	.009	.009	.009	.009	.009
.009	.009	.009	.009									
Hdwd GM GU		.000	.000	.000	.000	.000	.010	.010	.015	.015	.020	.020
.020	.025	.025	.025									
Hdwd PM GU		.000	.000	.000	.000	.000	.010	.010	.015	.015	.020	.020
.020	.025	.025	.025									

QUAIL No./ac

Slash Pine		.700	.100	.000	.002	.010	.040	.050	.060	.060	.060	.060
.060	.060	.060	.060									
Yellow Pine		.700	.100	.000	.002	.010	.040	.050	.060	.060	.060	.060
.060	.060	.060	.060									
Longleaf Pine		.700	.100	.000	.005	.020	.050	.060	.070	.070	.070	.070
.070	.070	.070	.070									
Mixed Hdwd/Pine		.700	.100	.000	.001	.015	.020	.030	.040	.040	.040	.040
.040	.040	.040	.040									
Hdwd GM PU		.700	.100	.000	.000	.000	.000	.000	.000	.000	.000	.000
.000	.000	.000	.000									
Hdwd GM GU		.400	.050	.000	.000	.000	.000	.000	.000	.000	.000	.000
.000	.000	.000	.000									
Hdwd PM GU		.400	.050	.000	.000	.000	.000	.000	.000	.000	.000	.000
.000	.000	.000	.000									

FOX SQUIRREL No./ac

Slash Pine		.000	.000	.000	.000	.010	.010	.020	.030	.050	.070	.085	.100
.120	.135	.015	.150									
Yellow Pine		.000	.000	.000	.000	.010	.010	.020	.030	.050	.070	.085	.100
.120	.135	.150	.150									

Longleaf Pine	.000	.000	.000	.000	.008	.010	.012	.020	.030	.035	.040	.050
.060 .070	.080	.080										
Mixed Hdwd/Pine	.000	.000	.000	.000	.150	.200	.310	.400	.520	.530	.530	.530
.530 .530	.530	.530										
Hdwd GM PU	.000	.000	.000	.000	.200	.300	.500	.650	.800	1.00	1.00	1.00
1.00 1.00	1.00	1.00										
Hdwd GM GU	.000	.000	.000	.000	.300	.400	.600	.800	1.00	1.00	1.00	1.00
1.00 1.00	1.00	1.00										
Hdwd PM GU	.000	.000	.000	.000	.150	.200	.310	.400	.520	.520	.520	.520
.520 .520	.520	.520										

TURKEY No./ac

Slash Pine	.040	.007	.007	.010	.012	.014	.017	.020	.020	.020	.020	.020
.020 .020	.020	.020										
Yellow Pine	.040	.007	.007	.010	.012	.015	.020	.025	.025	.025	.025	.025
.025 .025	.025	.025										
Longleaf Pine	.050	.010	.007	.010	.013	.017	.022	.025	.025	.025	.025	.025
.025 .025	.025	.025										
Mixed Hdwd/Pine	.040	.007	.007	.010	.013	.017	.025	.033	.040	.050	.050	.050
.050 .050	.050	.050										
Hdwd GM PU	.040	.007	.007	.010	.013	.017	.025	.033	.040	.050	.050	.050
.050 .050	.050	.050										
Hdwd GM GU	.033	.007	.007	.010	.017	.025	.033	.045	.067	.067	.067	.067
.067 .067	.067	.067										
Hdwd PM GU	.023	.007	.007	.010	.013	.015	.029	.031	.036	.040	.040	.040
.040 .040	.040	.040										

HABITAT CAPABILITY COEFFICIENTS
FOR

FOX SQUIRREL

*Important Note:
Optimum Habitat is expressed as 1.0!

	AGE CLASS															
WORKING GROUP	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	111-120	121-130	131-140	140+
YELLOWPINE	0	0	0	0	0	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40
LONGLEAF PINE	0	0	0	0	0	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40
PINE/HARDWOOD	0	0	0	0	.40	.50	.60	.80	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HARDWOOD/PINE	0	0	0	.50	.60	.80	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
BOTTOMLAND HDWD	0	0	0	.50	.60	.80	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
UPLAND HDWD	0	0	0	.40	.50	.60	.80	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

HABITAT CAPABILITY COEFFICIENTS
FOR

GRAY SQUIRREL

*Important Note:
Optimum Habitat is expressed as 1.0!

	AGE CLASS															
WORKING GROUP	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	111-120	121-130	131-140	140+
YELLOWPINE	0	0	0	0	0	0	0	0	.10	.10	.10	.10	.10	.10	.10	.10
LONGLEAF PINE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PINE/HARDWOOD	0	0	0	0	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20
HARDWOOD/PINE	0	0	0	0	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50
BOTTOMLAND HDWD	0	0	0	0	.50	.80	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
UPLAND HDWD	0	0	0	0	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20

HABITAT CAPABILITY COEFFICIENTS
FOR

EASTERN WILD TURKEY

*Important Note:
Optimum Habitat is expressed as 1.0!

	AGE CLASS															
WORKING GROUP	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	111-120	121-130	131-140	140+
YELLOWPINE	.40	.20	.20	.20	.50	.50	.75	.75	.75	.75	.75	.75	.75	.75	.75	.75
LONGLEAF PINE	.40	.20	.20	.20	.50	.65	.85	.85	.85	.85	.85	.85	.85	.85	.85	.85
PINE/HARDWOOD	.40	.35	.35	.40	.50	.50	.75	.75	.75	.85	.85	.90	.90	.90	.90	.90
HARDWOOD/PINE	.40	.35	.35	.45	.55	.75	.90	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
BOTTOMLAND HDWD	.40	.40	.40	.50	.70	.80	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
UPLAND HDWD	.35	.20	.20	.40	.50	.70	.90	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

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HABITAT CAPABILITY COEFFICIENTS
FOR

BOBWHITE QUAIL

*Important Note:
Optimum Habitat is expressed as 1.0!

	AGE CLASS															
WORKING GROUP	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	111-120	121-130	131-140	140+
YELLOWPINE	.75	.40	.10	.00	.00	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
LONGLEAF PINE	1.0	.50	.10	.00	.00	.20	.30	.30	.30	.30	.30	.30	.30	.30	.30	.30
PINE/HARDWOOD	.30	.15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
HARDWOOD/PINE	.20	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
BOTTOMLAND HDWD	.20	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
UPLAND HDWD	.60	.40	.00	.00	.00	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10

HABITAT CAPABILITY COEFFICIENTS
FOR

EASTERN BLUEBIRD

*Important Note:
Optimum Habitat is expressed as 1.0!

	AGE CLASS															
WORKING GROUP	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	111-120	121-130	131-140	140+
YELLOWPINE	.30	.10	.00	.00	.00	.00	.00	.00	.70	.70	.70	.76	.76	.76	.76	.76
LONGLEAF PINE	.20	.20	.00	.00	.20	.40	.60	.80	.80	1.0	1.0	1.0	1.0	1.0	1.0	1.0
PINE/HARDWOOD	.30	.10	.00	.00	.00	.25	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
HARDWOOD/PINE	.30	.10	.00	.00	.00	.25	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
BOTTOMLAND HDWD	.00	.00	.00	.00	.00	.10	.15	.15	.25	.40	.50	.50	.50	.50	.50	.50
UPLAND HDWD	.15	.10	.05	.05	.05	.15	.15	.20	.30	.40	.45	.66	.66	.66	.66	.66

11/02/90

HABITAT CAPABILITY COEFFICIENTS
FOR

YELLOW-BREASTED CHAT WARBLER

*Important Note:
Optimum Habitat is expressed as 1.0!

	AGE CLASS															
WORKING GROUP	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	111-120	121-130	131-140	140+
YELLOWPINE	.75	.78	.38	.38	.38	.38	.38	.38	.38	.38	.38	.25	.25	.25	.25	.25
LONGLEAF PINE	.15	.25	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15
PINE/HARDWOOD	.77	.83	.53	.13	.13	.13	.13	.13	.13	.13	.13	.25	.25	.25	.25	.25
HARDWOOD/PINE	.80	1.0	.38	.13	.13	.13	.13	.13	.13	.13	.13	.25	.25	.25	.25	.25
BOTTOMLAND HDWD	.50	.50	.40	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15	.15
UPLAND HDWD	.55	1.0	.38	.13	.13	.13	.13	.13	.13	.13	.13	.20	.20	.20	.20	.40

HABITAT CAPABILITY COEFFICIENTS
FOR

PILEATED WOODPECKER

*Important Note:
Optimum Habitat is expressed as 1.0!

	AGE CLASS															
WORKING GROUP	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	111-120	121-130	131-140	140+
YELLOWPINE	.10	.10	.00	.10	.30	.35	.40	.40	.66	.66	.66	.75	.75	.75	.75	.75
LONGLEAF PINE	.00	.00	.00	.10	.15	.15	.15	.15	.25	.25	.25	.30	.30	.30	.30	.30
PINE/HARDWOOD	.00	.00	.00	.20	.55	.60	.66	.66	.75	.75	.75	.95	.95	.95	.95	.95
HARDWOOD/PINE	.00	.00	.00	.30	.55	.65	.80	.80	.95	.95	.95	1.0	1.0	1.0	1.0	1.0
BOTTOMLAND HDWD	.00	.00	.00	.20	.55	.65	.85	.85	.95	1.0	1.0	1.0	1.0	1.0	1.0	1.0
UPLAND HDWD	.00	.00	.00	.20	.55	.65	.85	.85	.95	1.0	1.0	1.0	1.0	1.0	1.0	1.0

DBHABCAP - Habitat Capability Model . Knowles

Table 3. Habitat capability coefficients for DBHABCAP, animals or pounds per acre.

Working Group[a]	Age Class(yrs.) 0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	111-120	121-130	131-140	141+
								WHITETAILED DEER								
Y.P.	.110	.016	.000	.010	.010	.010	.015	.015	.015	.015	.015	.018	.018	.018	.018	.018
W.P.	.110	.010	.000	.000	.000	.010	.010	.010	.010	.016	.016	.016	.016	.016	.016	.016
P/Hd.	.090	.008	.000	.009	.009	.009	.009	.019	.019	.019	.020	.020	.020	.020	.020	.020
Cove	.130	.008	.000	.015	.015	.015	.015	.025	.025	.025	.020	.020	.020	.018	.018	.018
Upland	.040	.003	.000	.006	.006	.006	.006	.023	.023	.023	.023	.023	.023	.023	.023	.023
								E. WILD TURKEY								
Y.P.	.012	.000	.000	.000	.018	.022	.030	.030	.030	.030	.030	.030	.030	.030	.030	.030
W.P.	.012	.000	.000	.000	.010	.010	.016	.016	.016	.016	.016	.016	.016	.016	.016	.016
P/Hd.	.012	.000	.000	.000	.025	.035	.045	.045	.045	.045	.045	.045	.045	.045	.045	.045
Cove	.010	.000	.000	.000	.026	.026	.036	.036	.040	.040	.040	.040	.040	.035	.035	.035
Upland	.012	.000	.000	.000	.025	.032	.040	.040	.040	.040	.040	.040	.040	.040	.040	.040
								GRAY SQUIRREL								
Y.P.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
W.P.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
P/Hd.	.000	.000	.000	.000	.000	.025	.050	.100	.200	.333	.333	.333	.333	.333	.333	.333
Cove	.000	.000	.000	.000	.050	.100	.250	.333	.333	.500	.500	.500	.500	.500	.500	.500
Upland	.000	.000	.000	.000	.050	.100	.200	.300	.500	.500	.500	.500	.500	.500	.500	.500
								RUFFED GROUSE								
Y.P.	.125	.125	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
W.P.	.125	.125	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
P/Hd.	.125	.125	.100	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010
Cove	.125	.125	.100	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010
Upland	.125	.125	.100	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010
								HARD MAST								
Y.P.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.
W.P.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000	000.	000.	000.	000.
P/Hd.	000.	000.	000.	000.	4.	29.	49.	57.	65.	72.	77.	78.	89.	85.	85.	85.
Cove	000.	000.	000.	000.	14.	96.	163.	188.	213.	239.	254.	254.	254.	254.	254.	254.
Upland	000.	000.	000.	000.	13.	88.	148.	171.	194.	218.	231.	235	268.	256.	256.	256.

Table 3. (continued)

Working[a] Group	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	111-120	121-130	131-140	140+
							Age Class(yrs.)									
							WINTER BROWSE									
Y.P.	209.	157.	000.	19.	19.	19.	25.	25.	25.	25.	25.	30.	30.	30.	30.	000.
W.P.	209.	104.	000.	000.	000.	19.	19.	19.	19.	22.	22.	22.	22.	30.	30.	000.
P/Hd.	171.	85.	000.	000.	000.	17.	17.	17.	17.	17.	19.	19.	28.	28.	28.	000.
Cove	247.	82.	000.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	000.
Upland	76.	38.	000.	000.	000.	11.	11.	25.	25.	25.	25.	25.	25.	25.	25.	000.
							WINTER BROWSE, PRESCRIBE BURNED									
Y.P.	124.	106.	90.	78.	69.	63.	58.	51.	45.	45.	45.	45.	45.	45.	45.	45.
W.P.	124.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.
P/Hd.	124.	106.	90.	78.	69.	63.	58.	51.	45.	45.	45.	45.	45.	45.	45.	45.
Cove	150.	000.	000.	000.	000.	75.	68.	60.	55.	55.	55.	55.	55.	55.	55.	55.
Upland	124.	000.	000.	000.	000.	63.	58.	51.	45.	45.	45.	45.	45.	45.	45.	45.
							WINTER BROWSE, THINNED									
Y.P.	000.	000.	66.	56.	49.	43.	40.	36.	32.	28.	28.	28.	28.	28.	28.	28.
W.P.	000.	000.	40.	35.	30.	26.	24.	21.	21.	21.	21.	21.	21.	21.	21.	21.
P/Hd.	000.	000.	66.	56.	49.	43.	40.	36.	32.	28.	28.	28.	28.	28.	28.	28.
Cove	000.	000.	80.	67.	59.	52.	48.	43.	39.	34.	34.	34.	34.	34.	34.	34.
Upland	000.	000.	66.	56.	49.	43.	40.	36.	32.	28.	28.	28.	28.	28.	28.	28.
							THIN & PRESCRIBE BURN BENEFITS BY SPECIES									
Species							(Applies as prescribed)									
Deer	.013	.013	.005	.008	.010	.010	.010	-thinning benefits.								
Deer	.020	.018	.010	.015	.015	.015	.015	-burning benefits.								
Turkey	.002	.000	.000	.002	.002	.002	.002	-thinning benefits.								
Turkey	.005	.004	.000	.005	.009	.009	.009	-burning benefits.								
Squirrel	.000	.000	.000	.000	.000	.037	.037	-thinning benefits.								
Squirrel	.000	.000	.000	.000	.000	.000	.000	-burning benefits.								
Grouse	.000	.150	.150	.100	.005	.005	.005	-thinning benefits.								
Grouse	.000	.135	.100	.000	.000	.000	.000	-burning benefits.								

[a]Yellow Pine, White Pine, Mixed Pine/Hardwood, Cove Hardwood, and Upland Hardwood.

Table 3. Habitat capability coefficients for DBHABCAP, animals or pounds per acre.

Working Group[a]	Age Class(yrs.) 0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	111-120	121-130	131-140	141+
								WHITETAILED DEER								
Y.P.	.110	.016	.000	.010	.010	.010	.015	.015	.015	.015	.015	.018	.018	.018	.018	.018
W.P.	.110	.010	.000	.000	.000	.010	.010	.010	.010	.016	.016	.016	.016	.016	.016	.016
P/Hd.	.090	.008	.000	.009	.009	.009	.009	.019	.019	.019	.020	.020	.020	.020	.020	.020
Cove	.130	.008	.000	.015	.015	.015	.015	.025	.025	.025	.020	.020	.020	.018	.018	.018
Upland	.040	.008	.000	.006	.006	.006	.006	.023	.023	.023	.023	.023	.023	.023	.023	.023
								E. WILD TURKEY								
Y.P.	.012	.000	.000	.000	.018	.022	.030	.030	.030	.030	.030	.030	.030	.030	.030	.030
W.P.	.012	.000	.000	.000	.010	.010	.016	.016	.016	.016	.016	.016	.016	.016	.016	.016
P/Hd.	.012	.000	.000	.000	.025	.035	.045	.045	.045	.045	.045	.045	.045	.045	.045	.045
Cove	.010	.000	.000	.000	.026	.026	.036	.036	.040	.040	.040	.040	.040	.035	.035	.035
Upland	.012	.000	.000	.000	.025	.032	.040	.040	.040	.040	.040	.040	.040	.040	.040	.040
								GRAY SQUIRREL								
Y.P.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
W.P.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
P/Hd.	.000	.000	.000	.000	.000	.025	.050	.100	.200	.333	.333	.333	.333	.333	.333	.333
Cove	.000	.000	.000	.000	.050	.100	.250	.333	.333	.500	.500	.500	.500	.500	.500	.500
Upland	.000	.000	.000	.000	.050	.100	.200	.300	.500	.500	.500	.500	.500	.500	.500	.500
								RUFFED GROUSE								
Y.P.	.125	.125	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
W.P.	.125	.125	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
P/Hd.	.125	.125	.100	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010
Cove	.125	.125	.100	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010
Upland	.125	.125	.100	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010	.010
								HARD MAST								
Y.P.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.
W.P.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000	000.	000.	000.	000.
P/Hd.	000.	000.	000.	000.	4.	29.	49.	57.	65.	72.	77.	78.	89.	85.	85.	85.
Cove	000.	000.	000.	000.	14.	96.	163.	188.	213.	239.	254.	254.	254.	254.	254.	254.
Upland	000.	000.	000.	000.	13.	88.	148.	171.	194.	218.	231.	235	268.	256.	256.	256.

Table 3. (continued)

Working[a] Group	Age Class(yrs.) 0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	111-120	121-130	131-140	140+
							WINTER BROWSE									
Y.P.	209.	157.	000.	19.	19.	19.	25.	25.	25.	25.	25.	30.	30.	30.	30.	000.
W.P.	209.	104.	000.	000.	000.	19.	19.	19.	19.	22.	22.	22.	22.	30.	30.	000.
P/Hd.	171.	85.	000.	000.	000.	17.	17.	17.	17.	17.	19.	19.	28.	28.	28.	000.
Cove	247.	82.	000.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	29.	000.
Upland	76.	38.	000.	000.	000.	11.	11.	25.	25.	25.	25.	25.	25.	25.	25.	000.
							WINTER BROWSE, PRESCRIBE BURNED									
Y.P.	124.	106.	90.	78.	69.	63.	58.	51.	45.	45.	45.	45.	45.	45.	45.	45.
W.P.	124.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.	000.
P/Hd.	124.	106.	90.	78.	69.	63.	58.	51.	45.	45.	45.	45.	45.	45.	45.	45.
Cove	150.	000.	000.	000.	000.	75.	68.	60.	55.	55.	55.	55.	55.	55.	55.	55.
Upland	124.	000.	000.	000.	000.	63.	58.	51.	45.	45.	45.	45.	45.	45.	45.	45.
							WINTER BROWSE, THINNED									
Y.P.	000.	000.	66.	56.	49.	43.	40.	36.	32.	28.	28.	28.	28.	28.	28.	28.
W.P.	000.	000.	40.	35.	30.	26.	24.	21.	21.	21.	21.	21.	21.	21.	21.	21.
P/Hd.	000.	000.	66.	56.	49.	43.	40.	36.	32.	28.	28.	28.	28.	28.	28.	28.
Cove	000.	000.	80.	67.	59.	52.	48.	43.	39.	34.	34.	34.	34.	34.	34.	34.
Upland	000.	000.	66.	56.	49.	43.	40.	36.	32.	28.	28.	28.	28.	28.	28.	28.

THIN & PRESCRIBE BURN BENEFITS BY SPECIES (Applies as prescribed)

Species								
Deer	.013	.013	.005	.008	.010	.010	.010	-thinning benefits.
Deer	.020	.018	.010	.015	.015	.015	.015	-burning benefits.
Turkey	.002	.000	.000	.002	.002	.002	.002	-thinning benefits.
Turkey	.005	.004	.000	.005	.009	.009	.009	-burning benefits.
Squirrel	.000	.000	.000	.000	.000	.037	.037	-thinning benefits.
Squirrel	.000	.000	.000	.000	.000	.000	.000	-burning benefits.
Grouse	.000	.150	.150	.100	.005	.005	.005	-thinning benefits.
Grouse	.000	.135	.100	.000	.000	.000	.000	-burning benefits.

[a]Yellow Pine, White Pine, Mixed Pine/Hardwood, Cove Hardwood, and Upland Hardwood.

ALAHABCAP-- Bankhead NF

WHITE-TAILED DEER
BANKHEAD NATIONAL FOREST

Optimum Density: 1 per 20 acres or 0.05 deer per acre

Habitat	0-5*	6-10*	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	100
Loblolly	2	3	0	5	4	4	4	3	3	3	3	3
Burn			2	2	1	1	1	1	1	1	1	1
Thin			1	1	2	2	2	3	3	3	3	3
Longleaf	2	3	0	5	4	4	4	3	3	3	3	3
Burn	2	2	2	2	1	1	1	1	1	1	1	1
Thin			1	1	2	2	2	3	3	3	3	3
Virginia	3	3	0	5	5	5	5	5	5	5	5	5
Thin			2	2	2	2	2	2	2	2	2	2
Pine-Hdwd	2	3	0	5	4	4	4	3	3	3	3	3
Burn			2	2	1	1	1	1	1	1	1	1
Thin			1	1	2	2	2	3	3	3	3	3
Hdwd-Pine	2	3	0	5	4	4	3	3	3	3	3	3
Burn			2	2	2	2	2	2	2	2	2	2
Thin			2	2	2	2	2	2	2	2	2	2
Upland Hdwd	2	3	0	5	4	3	3	3	3	3	3	3
Cove Hdwd	2	3	0	5	4	3	3	3	3	3	3	3
Hemlock Cove	3	4	0	0	5	5	5	5	5	5	5	5
Bottomland	1	3	0	5	3	2	2	2	2	2	2	2
Natural Opening	2											
Sodded Opening	1											
Wetland Marsh	1											

-Habitat rating

Rating	Per Acre Coef
1-best	.05
2-good	.04
3-fair	.03
4-not good	.02
5-poor	.01
0-not suitable	

*Coef for 0-5 & 6-10 higher than those given.
1 = 0.1
2 = 0.08
3 = 0.05
(except Hemlock Cove Hardwood)

Burn Rating	Per Acre Coef
1	.02
2	.01
3	.001

Thin Rating	Per Acre Coef
1	.02
2	.01
3	.001

EASTERN WILD TURKEY
BANKHEAD NATIONAL FOREST

Optimum Density 1 per 20 acres .05 turkey per acre

Habitat	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	100
Loblolly	3	5	0	0	5	4	4	4	4	4	4	4
Burn			2	2	1	1	1	1	1	1	1	1
Thin			3	3	3	3	3	3	3	3	3	3
Longleaf	3	5	0	0	5	4	4	4	4	4	4	4
Burn			2	2	1	1	1	1	1	1	1	1
Thin			3	3	3	3	3	3	3	3	3	3
Virginia	4	5	0	0	0	5	5	5	5	5	5	5
Thin			0	0	0	3	3	3	3	3	3	3
Pine-Hdwd	3	5	0	0	5	4	3	2	2	2	2	2
Burn			2	2	1	1	1	1	1	1	1	1
Thin			3	3	0	0	0	0	0	0	0	0
Hdwd-Pine	3	5	0	0	5	4	3	2	2	2	2	2
Burn			2	2	1	1	1	1	1	1	1	1
Thin			0	0	0	0	0	0	0	0	0	0
Upland Hdwd	3	5	0	5	3	2	2	1	1	1	1	1
Cove Hdwd	3	5	0	5	2	2	2	1	1	1	1	1
Hemlock Cove	3	5	0	0	5	5	4	4	4	4	4	4
Bottomland*	3	5	0	4	2	2	1	1	1	1	1	1
Natural Opening	2											
Sodded Opening*	1											
Wetland Marsh	5											

-Habitat Rating

Rating	Per Acre Coef
1-best	.05
2-good	.04
3-fair	.03
4-not good	.02
5-poor	.01
0-not suitable	.001

*Bottomland Hardwood (higher Coef rating)

*Sodded opening .5

Burn Rating	Per Acre Coef
1	.02
2	.01
3	.001

Thin Rating	Per Acre Coef
1	.02
2	.01
3	.002

EASTERN GRAY SQUIRREL
BANKHEAD NATIONAL FOREST

Optimum Density 1 per acre 1 squirrel/acre

Habitat	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	100
Loblolly					0	0	0	5	5	5	5	5
Burn												
Thin					4	4	4	3	3	3	3	3
Longleaf					0	0	0	5	5	5	5	5
Burn												
Thin					4	4	4	3	3	3	3	3
Virginia								0	0	0	0	0
Thin								4	4	4	4	4
Pine-Hdwd					4	4	4	2	2	2	2	2
Burn												
Thin					2	2	2	1	1	1	1	1
Hdwd-Pine					3	3	3	1	1	1	1	1
Burn												
Thin												
Upland Hdwd					3	3	3	1	1	1	1	1
Cove Hdwd					3	3	3	1	1	1	1	1
Hemlock Cove					5	5	5	4	4	4	4	4
Bottomland*					2	2	2	1	1	1	1	1
Natural Opening												
Sodded Opening												
Wetland Marsh												

-Habitat Rating

Rating	Per Acre Coef
1-best	0.5
2-good	0.4
3-fair	0.25
4-not good	.12
5-poor	.02
0-not suitable	.01

*Bottomland Hdwd has higher per acre Coef.

Thinning Rating
1. .04 2. .02 3. .002 4. .001

BOBWHITE QUAIL
BANKHEAD NATIONAL FOREST

Optimum Density 1 per 2 acres 0.5 quail per acre

Habitat	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	100
Loblolly	1	3	5	5	5	4	4	4	4	3	3	3
Burn	1		3	3	2	2	2	2	2	2	2	2
Thin			3	3	2	2	2	2	2	2	2	2
Longleaf	1	3	5	5	5	4	4	4	4	3	3	3
Burn	1		3	3	2	2	2	2	2	2	2	2
Thin			3	3	2	2	2	2	2	2	2	2
Virginia	1	3	5	5	5	5	5	5	5	5	5	5
Thin			3	3	3	3	3	3	3	3	3	3
Pine-Hdwd	1	3	5	5	5	5	5	5	5	5	5	5
Burn			3	3	2	2	2	2	2	2	2	2
Thin			3	3	2	2	2	2	2	2	2	2
Hdwd-Pine	1	3	5	5	5	5	5	5	5	5	5	5
Burn			3	3	2	2	2	2	2	2	2	2
Thin			3	3	2	2	2	2	2	2	2	2
Upland Hdwd	1	3										
Cove Hdwd	2	4										
Hemlock Cove	4	5										
Bottomland	1	3										
Natural Opening	1											
Sodded Opening	1											
Wetland Marsh												

Habitat Rating

Rating	Per Acre Coef
1	0.5
2	.20
3	.10
4	.05
5	0.001

Sodded opening	1.0

Burning Rating	Per Acre Coef
1	.2
2	.06
3	.01

Thinning Rating	Per Acre Coef
1	.04
2	.03
3	.01

PILEATED WOODPECKER
BANKHEAD NATIONAL FOREST

Optimum Density 1 pair per 110 acres or .009 pairs per acre

Habitat	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	100
Loblolly						2	2	2	2	2	2	2
Burn												
Thin						1	1	1	1	1	1	1
Longleaf						2	2	2	2	2	2	2
Burn												
Thin						1	1	1	1	1	1	1
Virginia						3	3	3	3	3	3	3
Thin												
Pine-Hdwd						1	1	1	1	1	1	1
Burn												
Thin						2	2	2	2	2	2	2
Hdwd-Pine						1	1	1	1	1	1	1
Burn												
Thin						2	2	2	2	2	2	2
Upland Hdwd						1	1	1	1	1	1	1
Cove Hdwd						1	1	1	1	1	1	1
Hemlock Cove						1	1	1	1	1	1	1
Bottomland						1	1	1	1	1	1	1
Natural Opening												
Sodded Opening												
Wetland Marsh												

-Habitat Rating

Rating	Per Acre Coef
1	.009
2	.005
3	.001

Thinning Rating	Per Acre Coef
1	-.004
2	-.005

EASTERN BLUEBIRD
BANKHEAD NATIONAL FOREST

Optimum Density 1 pair per 20 acres .05 pairs per acre

Habitat	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	100
Loblolly	1	2										
Burn												
Thin												
Longleaf	1	2										
Burn												
Thin												
Virginia	1	2										
Thin												
Pine-Hdwd	1	2										
Burn												
Thin												
Hdwd-Pine	1	2										
Burn												
Thin												
Upland Hdwd	1	2										
Cove Hdwd	1	2										
Hemlock Cove	1	2										
Bottomland	1	2										
Natural Opening	1											
Sodded Opening	2											
Wetland Marsh	1											

Habitat Rating	Per Acre Coef
1	.05
2	.025

NORTHERN FLICKER
BANKHEAD NATIONAL FOREST

Optimum Density 1 pair per 40 acres .025 pairs per acre

Habitat	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	100
Loblolly	1	2							2	2	2	2
Burn												
Thin									2	2	2	2
Longleaf	1	2							2	2	2	2
Burn												
Thin									2	2	2	2
Virginia	1	2										
Thin												
Pine-Hdwd	1	2										
Burn												
Thin												
Hdwd-Pine	1	2										
Burn												
Thin												
Upland Hdwd	1	2										
Cove Hdwd	1	2										
Hemlock Cove	1	2										
Bottomland	1	2										
Natural Opening	1											
Sodded Opening	2											
Wetland Marsh	1											

Habitat Rating

Rating	Per Acre Coef
1	.025
2	.012

HOODED WARBLER
BANKHEAD NATIONAL FOREST

Optimum Density 1 pair per 20 acres .05 pairs per acre

Habitat	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	100
Loblolly						5	5	5	4	4	4	4
Burn						4	4	4	3	3	3	3
Thin						4	4	4	3	3	3	3
Longleaf						0	0	0	0	0	0	0
Burn												
Thin												
Virginia						0	0	0	0	0	0	0
Thin												
Pine-Hdwd						3	3	2	2	2	2	2
Burn						2	2	1	1	1	1	1
Thin						2	2	1	1	1	1	1
Hdwd-Pine						3	3	2	2	2	2	2
Burn						2	2	1	1	1	1	1
Thin						2	2	1	1	1	1	1
Upland Hdwd						3	3	2	2	2	2	2
Cove Hdwd						3	3	2	2	2	2	2
Hemlock Cove						3	3	2	2	2	2	2
Bottomland						2	2	1	1	1	1	1
Natural Opening												
Sodded Opening												
Wetland Marsh												

Habitat Rating	Per Acre Coef
1	.05
2	.04
3	.03
4	.02
5	.015

Burn Rating	Per Acre Coef
1	-.02
2	-.015
3	-.01
4	-.008

Thin Rating	Per Acre Coef
1	-.02
2	-.015
3	-.01
4	-.007

RED-COCKADED WOODPECKER
BANKHEAD NATIONAL FOREST

Optimum Density 1 clan per 125 acres .008 clans per acre

Habitat	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	100
Loblolly	2	3			4	4	3	2	2	2	2	2
Burn					1	1	1	1	1	1	1	1
Thin					1	1	1	1	1	1	1	1
Longleaf					4	4	3	2	2	2	2	2
Burn					1	1	1	1	1	1	1	1
Thin					1	1	1	1	1	1	1	1
Virginia												
Thin												
Pine-Hdwd					4	4	3	2	2	2	2	2
Burn					1	1	1	1	1	1	1	1
Thin					1	1	1	1	1	1	1	1
Hdwd-Pine												
Burn												
Thin												
Upland Hdwd												
Cove Hdwd												
Hemlock Cove												
Bottomland												
Natural Opening												
Sodded Opening												
Wetland Marsh												

Habitat Rating	Per Acre Coef
1	.008
2	.004
3	.003
4	.002

Burning Rating	Per Acre Coef
1	.002

Thinning Rating	Per Acre Coef
1	.002

Kistachie NF

Longleaf Pine Grazing Capacity

WG 2

Stand Age	*Herbage Yield Lbs./Acre (BA) Thnd.	Unthnd.	**Capacity Coef. HM/Acre (BA) Thnd.	Unthnd.
0 - 5	2000	0-10=1950	1.11	0-10=1.1
6 - 10	1900		1.08	
11 - 20	1100	350	.61	.20
21 - 30	(80) 1100	(120) 800	(80) .61	(120) .44
31 - 40	(90) 1050	(120) 800	(90) .58	(120) .44
41 - 50	(100) 1000	(120) 800	(100) .56	(120) .44
51 - 60	(100) 1000	(120) 800	(100) .56	(120) .44
61 - 70	(100) 1000	(120) 800	(100) .56	(120) .44
71 - 80	(100) 1000	(120) 800	(100) .56	(120) .44
81 - 90	(100) 1000	(120) 800	(100) .56	(120) .44
91 - 100	(90) 1050	(110) 900	(90) .58	(110) .50
101 - 110	(90) 1050	(110) 900	(90) .58	(110) .50

*This is total production.

**This is net capacity which is 50% of total.

CCOEFS → HYCOEFS

MCOEFS → HMCOEFS

Longleaf Pine Habitat Capability

Acres/Animal
(XX)=Basal Area for Column

Stand Age	Deer		Turkey		Quail	
	Thnd.	Unthnd.	Thnd.	Unthnd.	Thnd.	Unthnd.
0 - 5	20		*		2	
6 - 10	40		*		*	
11 - 20	250		200		*	
21 - 30	(80) 200	(120) 300	(80) 140	(120) 200	(80) *	(120) *
31 - 40	(90) 100	(120) 150	(90) 130	(120) 150	(90) *	(120) *
41 - 50	(100) 50	(120) 100	(100) 120	(120) 140	(100) 10	(120) 20
51 - 60	(100) 50	(120) 75	(100) 100	(120) 120	(100) 6	(120) 10
61 - 70	(100) 50	(120) 75	(100) 90	(120) 110	(100) 5	(120) 10
71 - 80	(100) 50	(120) 75	(100) 80	(120) 100	(100) 5	(120) 10
81 - 90	(100) 50	(120) 75	(100) 80	(120) 100	(100) 5	(120) 10
91 - 100	(90) 50	(110) 75	(90) 80	(110) 100	(90) 5	(110) 10
101 - 110	(90) 50	(110) 75	(90) 80	(110) 100	(90) 5	(110) 10

* Not suitable habitat or not used by hunters.

Yellow Pine Habitat Capability

Acres/Animal
(XX)=Basal Area in Column

Stand Age	Deer		Turkey		Quail	
	Thnd.	Unthnd.	Thnd.	Unthnd.	Thnd.	Unthnd.
0 - 5	20		*		3	
6 - 10	60		*		*	
11 - 20	200		*		*	
21 - 30	(90) 100	(120) 150	(90) 160	(120) 180	(90) *	(120) *
31 - 40	(100) 80	(120) 120	(100) 140	(120) 170	(100) *	(120) *
41 - 50	(100) 60	(120) 100	(100) 130	(120) 150	(100) *	(120) *
51 - 60	(100) 50	(120) 90	(100) 120	(120) 140	(100) 10	(120) 20
61 - 70	(100) 40	(120) 80	(100) 100	(120) 120	(100) 10	(120) 20
71 - 80	(100) 40	(120) 80	(100) 100	(120) 120	(100) 10	(120) 20
81 - 90	(70) 40	(120) 80	(70) 70	(120) 90	(70) 10	(120) 20
91 - 100	(70) 40	(120) 80	(70) 70	(120) 90	(70) 10	(120) 20
101 - 110	(70) 40	(120) 80	(70) 70	(120) 90	(70) 10	(120) 20

* These types not suitable habitat or are not usable for hunting.

Mixed Pine-Hardwood Habitat Capability

Acres/Animal
(XX)=Basal Area in Column

Stand Age	Deer		Turkey		Squirrel	
	Thnd.	Unthnd.	Thnd.	Unthnd.	Thnd.	Unthnd.
0 - 5	12		*		*	
6 - 10	100		*		*	
11 - 20	200		*		*	
	(90)	(110)	(90)	(110)	(90)	(110)
21 - 30	200	250	120	120	*	*
	(90)	(110)	(90)	(110)	(90)	(110)
31 - 40	100	150	80	110	*	*
	(90)	(110)	(90)	(110)	(90)	(110)
41 - 50	50	90	60	80	8	8
	(90)	(110)	(90)	(110)	(90)	(110)
51 - 60	35	55	50	70	4	4
	(90)	(110)	(90)	(110)	(90)	(110)
61 - 70	35	55	50	70	2	2
	(90)	(110)	(90)	(110)	(90)	(110)
71 - 80	35	55	45	60	2	2
	(90)	(110)	(90)	(110)	(90)	(110)
81 - 90	35	55	45	50	2	2
	(90)	(110)	(90)	(110)	(90)	(110)
91 - 100	35	55	45	50	2	2
	(90)	(110)	(90)	(110)	(90)	(110)
101 - 110	35	55	40	50	2	2

* Not suitable types.

Upland Hardwood Habitat Capability

Acres/Animal
(XX)=Basal Area in Column

Stand Age	Deer		Turkey		Squirrel	
	Thnd.	Unthnd.	Thnd.	Unthnd.	Thnd.	Unthnd.
0 - 5	20		*		*	
6 - 10	60		*		*	
11 - 20	150		200		*	
21 - 30	(60) 100	(90) 200	(60) 110	(90) 120	(60) *	(90) *
31 - 40	(70) 75	(90) 100	(70) 70	(90) 80	(60) *	(90) *
41 - 50	(70) 60	(90) 80	(70) 60	(90) 70	(70) 3	(90) 3
51 - 60	(80) 30	(90) 40	(80) 40	(90) 50	(80) 2	(90) 2
61 - 70	(80) 30	(90) 40	(80) 35	(90) 35	(80) 1	(90) 1
71 - 80	(80) 30	(90) 40	(80) 35	(90) 35	(80) 1	(90) 1
81 - 90	(80) 30	(90) 40	(80) 35	(90) 35	(80) 1	(90) 1
91 - 100	(80) 30	(90) 40	(80) 35	(90) 35	(80) 1	(90) 1
101 - 110	(80) 30	(90) 40	(80) 35	(90) 35	(80) 1	(90) 1

* Not suitable types.

Bottomland Hardwood Habitat Capability

Acres/Animal
(XX)=Basal Area in Column

Stand Age	Deer		Turkey		Squirrel	
	Thnd.	Unthnd.	Thnd.	Unthnd.	Thnd.	Unthnd.
0 - 5	7		*		*	
6 - 10	50		*		*	
11 - 20	200		120		*	
21 - 30	(70) 200	(140) 300	(70) 100	(140) 120	(70) *	(140) *
31 - 40	(55) 100	(140) 150	(55) 60	(140) 80	(55) *	(140) *
41 - 50	(55) 20	(140) 40	(55) 40	(140) 60	(55) 4	(140) 4
51 - 60	*(60) 15	**(90) 20	(60) 25	(90) 50	(60) 1	(90) 1
61 - 70	*(60) 15	**(90) 20	(60) 25	(90) 40	(60) 1	(90) 1
71 - 80	*(60) 15	**(90) 20	(60) 25	(90) 40	(60) 1	(90) 1
81 - 90	*(60) 15	**(90)) 20	(60) 25	(90) 40	(60) 1	(90) 1
91 - 100	*(60) 15	**(90) 20	(60) 25	(90) 40	(60) 1	(90) 1
101 - 110	*(60) 15	**(90) 20	(60) 25	(90)) 40	(60) 1	(90) 1
111 - 120	*(60) 15	**(90) 20	(60) 25	(90) 40	(60) 1	(90) 1

* WSI will result in 60 BA. Midstory Shade equates to 90BA in existing stands.
** Basal Areas in Unthinned 50 + stands will not materially increase.

VAHABCAP-- Jefferson NF

GCOF

+555555555555555555555555555555555555555555555555555555555555555

R C 8 F

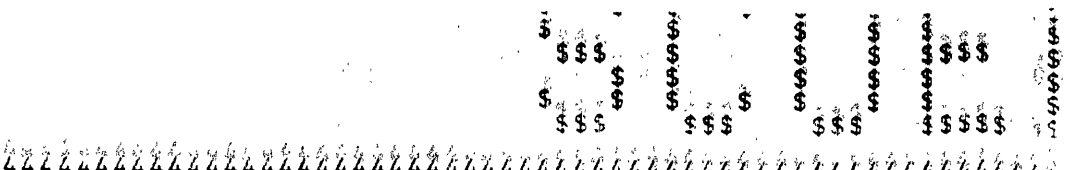
AOS/VS REVISION 7
AOS/VS XLPT-32 REVISI

# of Grouse/Acre

(Jefferson Coeffs)

W61 = yellow pine / pine-[illegible]
W62 = white pine/white pine hardwood
W63 = No. Red Oak/white Oak / Hickory
W64 = Hardwood-Pine
W65 = No Hardwood/ Spruce/Fir
W66 = Cove Hardwood
W67 = Upland Hardwood

	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	111-120	121-130	131-140	141-150
W61	.023	.043	.044	.032	.025	.021	.018	.016	.015	.014	.013	.013	.014	.014	.014	.014
W62	.053	.103	.102	.071	.053	.044	.042	.042	.042	.040	.038	.036	.033	.031	.031	.030
W63	.081	.151	.148	.103	.071	.061	.061	.062	.060	.054	.044	.034	.029	.026	.024	.023
W64	.029	.058	.057	.044	.035	.031	.029	.028	.027	.026	.025	.024	.024	.023	.023	.022
W65	.054	.103	.105	.080	.073	.063	.058	.057	.055	.052	.047	.043	.041	.038	.036	.035
W66	.070	.155	.144	.103	.069	.052	.053	.056	.057	.053	.044	.033	.028	.025	.023	.022
W67	.045	.091	.091	.055	.037	.029	.030	.032	.032	.029	.022	.016	.014	.013	.012	.011



R C 8 F 1

AOS/VS REVISION 7.6
AOS/VS XLPT-32 REVISION

# of Squirrel / Acre

(Diffusion Coeff 3)

	0	5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
WG1	.011	.029	.054	.093	.157	.254	.372	.497	.590	.629	.629	.622	.629	.640	.640	.636	
WG2	.019	.046	.076	.133	.225	.380	.526	.654	.760	.796	.819	.851	.883	.897	.893	.888	
WG3	.015	.046	.137	.411	.849	1.01	.982	.452	.752	.923	.013	.043	.033	.013	.002	.98	
WG4	.000	.020	.061	.132	.354	.671	.071	.511	.841	.982	.002	.001	.991	.971	.951	.94	
WG5	.004	.012	.020	.053	.133	.230	.347	.492	.628	.725	.777	.801	.801	.797	.797	.797	
WG6	.033	.077	.132	.252	.428	.668	.965	1.261	.551	.791	.942	.052	.112	.152	.702	.17	
WG7	.023	.023	.058	.173	.520	.9931	.381	.691	.922	.062	.162	.232	.242	.242	.232	.22	

AOS/VS REVISION 7.0
AOS/VS XLPT-32 REVISION

≠ Turkey / Acre

(Jefferson coeffs)

Age Class

	0-5	6-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	111-120	121-130	131-140	141-150
WG1	.003	.003	.003	.004	.005	.006	.007	.008	.008	.008	.008	.008	.007	.007	.006	.006
WG2	.005	.003	.003	.003	.004	.005	.007	.008	.010	.010	.011	.011	.011	.011	.011	.011
WG3	.011	.008	.005	.005	.009	.017	.024	.028	.030	.031	.031	.031	.030	.029	.029	.029
WG4	.009	.007	.006	.007	.009	.014	.018	.022	.024	.024	.024	.024	.023	.023	.023	.023
WG5	.003	.002	.002	.002	.002	.003	.005	.006	.007	.008	.008	.008	.008	.008	.008	.008
WG6	.010	.008	.006	.007	.010	.015	.020	.023	.025	.026	.026	.026	.026	.026	.026	.026
WG7	.009	.006	.004	.005	.008	.014	.021	.025	.027	.027	.026	.025	.024	.023	.024	.024

These coefficients are within the Habcap program

# of Additional deer/acre by working group for THINNING

Yellow pine/pine-hardwd	White pine/wht. pn-hdwd	NRO/WHO/Hickory	Hardwood Pine
.013	.013	.009	.012

No. Hdwd/Spruce/Fir	Cove Hdwd	Upland Hdwd
.013	.013	.012

# of additional deer/acre by working group for BURNING

YP/P-H	Wt. P/P-H	NRO/WHO/Hick	Hd-Pn	No. Hd/Spr/Fir	Cove Hd	Upland Hd
.022	.022	.016	.020	.022	.022	.02

Additional turkey/acre by working group for THINNING

YP/P-H	Wt. P/P-H	NRO/WHO/Hick	Hd/Pn	No. Hd/Spr/Fir	Cove Hd	Upland Hd
.002	.002	.002	.002	.002	.002	.00

additional turkey/acre by working group for BURNING

.02	.02	.02	.02	.02	.02	.02

additional squirrel/acre by working group for THINNING

.037	.037	0	.037	.037	.037	.037

additional squirrel/acre by working group for BURNING

0	0	0	0	0	0	0

additional grouse/acre by working group for THINNING

0	.150	0	.150	0	.150	.150

additional grouse/acre by working group for BURNING

0	.137	0	.137	0	.137	.137

Wildlife Relationships in CompPATS

Animals Per Square Mile

Forest Type	Age	Species					
		Deer	Squirrel	Woodpecker	Mouse	Turkey	Quail
Pine	0-10	90	1	0	37,120	2	320
	11-20	26	6	0	6,400	0	19
	21-40	3	32	2	3,840	2	13
	41-70	13	64	5	1,280	4	13
	71-100	13	128	6	1,280	6	13
	101+	13	160	10	1,280	5	13
Hardwood	0-10	115	1	0	37,120	2	192
	11-20	6	6	0	2,560	0	6
	21-40	13	64	2	1,280	2	6
	41-70	19	128	6	1,280	8	6
	71-100	19	211	10	1,280	11	6
	100+	19	256	13	1,280	10	6
Pine	Uneven	13	32	5	1,280	3	32
Hardwood	Uneven	19	320	6	1,280	5	13

The Ouachita wildlife habitat models used by CompPATS were developed by the Wildlife and Range Staff and the Forest Planning Team on the Ouachita National Forest, the Arkansas Game and Fish Commission, the Oklahoma Division of Wildlife Conservation, and faculty from several universities. The following individuals were primarily responsible for development of the models:

DEER
- David Urbston, PhD, Ouachita National Forest and Arkansas Game and Fish Commission
- Donny Harris, Arkansas Game and Fish Commission
- Larry Hedrick, Ouachita National Forest

SQUIRREL
- David Urbston, Ouachita National Forest and Arkansas Game and Fish Commission
- Donny Harris, Arkansas Game and Fish Commission
- Larry Hedrick, Ouachita National Forest

TURKEY
- David Urbston, Ouachita National Forest
- Donny Harris, Arkansas Game and Fish Commission
- Bob McAnnaly, Arkansas Game and Fish Commission
- Ron Masters, Oklahoma Division of Wildlife Conservation
- Jimmy Huntley, USDA Forest Service - Southern Region
- Ron Smith, Arkansas Game and Fish Commission
- Charles Gobar, Ouachita National Forest

QUAIL
- Larry Hedrick, Ouachita National Forest
- David Urbston, Arkansas Game and Fish Commission
- Donny Harris, Arkansas Game and Fish Commission

WOODPECKER
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- Dr. Douglas James, University of Arkansas at Fayetteville

MOUSE
- David Saugey, Ouachita National Forest
- Dr. V.R. McDaniel, Arkansas State University
- Dr. Gary A. Heidt, University of Arkansas at Little Rock

Deer - Main Division, Pine

	Stand Age							
Treatment	0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	.14	.04	.01	.02	.02	.02	.02	.20
Inten Site Prep	.10							
Moderate Ste Pr	.15							
Low Inten St Pr	.12							
Thinning			.02	.01	.01	.01		
WSI - Ovrstry			.01	.01	.01	.01		
WSI - Midstry			.02	.02	.02	.02		
WL Seeding	.02							.02
WL Shrub Plant	.01							.01
Presc Burning		.03	.001	.02	.02	.02	.01	
Release	-.02	-.02					-.02	

Deer - Main Division, Hardwood

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	.18	.01	.03	.03	.03	.03	.03	.20
Thinning			.01	.01	.01	.01		
WSI - Ovrstry			.04	.04	.04	.04	.05	
WSI - Midstry			.04	.04	.04	.04	.04	
WL Seeding	.02							.02
WL Shrub Plant	.01							.01
Presc Burning								
Release								

Deer - Tiak District, Pine

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	.16	.005	.01	.03	.03	.03	.03	.20
Inten Site Prep	.12							
Moderate Ste Pr	.16							
Low Inten St Pr	.14							
Thinning			.01	.01	.01	.01		
WSI - Ovrstry			.02	.02	.02	.02		
WSI - Midstry			.04	.04	.04	.04	.03	
WL Seeding	.02							.02
WL Shrub Plant	.01							.01
Presc Burning		.001	.02	.03	.03	.03	.03	
Release	-.02						-.02	

Deer - Tiak District, Hardwood

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	.18	.01	.03	.03	.04	.04	.05	.20
Thinning			.02	.02	.02	.02		
WSI - Ovrstry			.10	.10	.10	.10	.10	
WSI - Midstry			.08	.08	.08	.08	.08	
WL Seeding	.02							.02
WL Shrub Plant	.01							.01
Presc Burning								
Release								

Squirrel - Main Division, Pine

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	.001	.01	.05	.10	.15	.20	.05	.00
Thinning			-.025	-.05	-.10	-.15		
WSI - Ovrstry			.10	.10				
WSI - Midstry				.05				
WL Seeding								
WL Shrub Plant	.01	.01	.05	.05	.10	.10	.03	.01
Presc Burning		-.0025	-.016	-.025	-.066	-.082	-.01	
Release	-.001	-.003						

Squirrel - Main Division, Hardwood

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	.01	.05	.10	.20	.30	.40	.50	.00
Thinning			-.05	-.10				
WSI - Ovrstry			.20	.35				
WSI - Midstry				.10				
WL Seeding								
WL Shrub Plant	.01	.01	.05	.05	.10	.10	.10	.01
Presc Burning				-.02	-.03	-.04	-.04	
Release	-.007	-.03						

Squirrel - Tiak District, Pine

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	.001	.01	.05	.10	.20	.25	.08	.00
Thinning			-.025	-.05	-.10	-.15		
WSI - Ovrstry			.10	.10				
WSI - Midstry				.05				
WL Seeding								
WL Shrub Plant	.01	.01	.05	.05	.10	.10	.03	.01
Presc Burning		-.003	-.016	-.05	-.066	-.082	-.01	
Release	-.001	-.003						

Squirrel - Tiak District, Hardwood

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	.01	.05	.10	.20	.30	.40	.70	.00
Thinning			-.05	-.10				
WSI - Ovrstry			.20	.40				
WSI - Midstry				.10				
WL Seeding								
WL Shrub Plant	.01	.01	.05	.05	.10	.10	.10	.01
Presc Burning			-.01		-.05	-.06	-.04	
Release	-.005	-.03						

Pileated Woodpecker - Pine

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	.00	.00	.0025	.0075	.010	.015	.0075	.00
Thinning			-.001	-.002	-.003	-.004		
WSI - Ovrstry			-.002	-.003				
WSI - Midstry			-.001	-.0015				
WL Seeding								
WL Shrub Plant								
Presc Burning			.0002	.0007	.001	.0015	.0007	
Release								

Pileated Woodpecker - Hardwood

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	.00	.00	.0025	.010	.015	.020	.010	.00
Thinning			-.001	-.004	-.006	-.008		
WSI - Ovrstry			-.002	-.006				
WSI - Midstry			-.001	-.003				
WL Seeding								
WL Shrub Plant								
Presc Burning				.001	.0015	.002	.001	
Release								

Harvest Mouse - Main Division, Pine

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	58.0	10.0	6.0	2.0	2.0	2.0	2.0	20.0
Inten Site Prep	60.0							
Moderate Ste Pr	47.0							
Low Inten St Pr	42.0							
Thinning			2.0	2.0				
WSI - Ovrstry			2.0	2.0				
WSI - Midstry			2.0	2.0				
WL Seeding	5.0		5.0	5.0	5.0	5.0	5.0	5.0
WL Shrub Plant	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Presc Burning			-6.0	-2.0	-2.0	-2.0	-2.0	
Release	20.0	10.0						

Harvest Mouse - Main Division, Hardwood

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	58.0	4.0	2.0	2.0	2.0	2.0	2.0	20.0
Inten Site Prep	60.0							
Moderate Ste Pr	37.0							
Low Inten St Pr	22.0							
Thinning			2.0	2.0				
WSI - Ovrstry			2.0	2.0	2.0	2.0		
WSI - Midstry			2.0	2.0	2.0	2.0		
WL Seeding	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
WL Shrub Plant	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Presc Burning				-2.0	-2.0	-2.0	-2.0	
Release	10.0	5.0						

Harvest Mouse - Tiak District, Pine

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	58.0	8.0	5.0	2.0	2.0	2.0	2.0	20.0
Inten Site Prep	60.0							
Moderate Ste Pr	47.0							
Low Inten St Pr	42.0							
Thinning			2.0	2.0				
WSI - Ovrstry			2.0	2.0				
WSI - Midstry			2.0	2.0				
WL Seeding	5.0		5.0	5.0	5.0	5.0	5.0	5.0
WL Shrub Plant	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Presc Burning			-5.0	-2.0	-2.0	-2.0	-2.0	
Release	20.0	10.0						

Harvest Mouse - Tiak District, Hardwood

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	58.0	3.0	2.0	2.0	2.0	2.0	2.0	30.0
Inten Site Prep	60.0							
Moderate Ste Pr	37.0							
Low Inten St Pr	22.0							
Thinning			2.0	2.0				
WSI - Ovrstry			2.0	2.0	2.0	2.0		
WSI - Midstry			2.0	2.0	2.0	2.0		
WL Seeding	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
WL Shrub Plant	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Presc Burning				-2.0	-2.0	-2.0	-2.0	
Release	10.0	5.0						

Turkey - Main Division, Pine

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	.0024	.0004	.0031	.0062	.0090	.0078	.0047	.5000
Inten Site Prep	.0031							
Moderate Ste Pr	.0047							
Low Inten St Pr	.0031							
Thinning			.0047	.0039	.0031			
WSI - Ovrstry								
WSI - Midstry				.0039	.0039	.0039		
WL Seeding				.0024	.0024	.0024		
WL Shrub Plant								
Presc Burning		.0070	.0070	.0062	.0055	.0055		
Release	.0008	.0008						

Turkey - Main Division, Hardwood

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	.0024	.0004	.0031	.0130	.0170	.0160	.0078	.5000
Inten Site Prep	.0016							
Moderate Ste Pr	.0031							
Low Inten St Pr	.0016							
Thinning			.0031	.0024	.0016			
WSI - Ovrstry			.0016	.0008	.0004			
WSI - Midstry				.0031	.0031	.0031		
WL Seeding								
WL Shrub Plant								
Presc Burning		.0039	.0039	.0031	.0024	.0024		
Release	.0008	.0008						

Turkey - Tiak District, Pine

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	.0024	.0004	.0047	.0078	.0110	.0090	.0062	.5000
Inten Site Prep	.0031							
Moderate Ste Pr	.0047							
Low Inten St Pr	.0031							
Thinning			.0055	.0047	.0039			
WSI - Ovrstry								
WSI - Midstry			.0039	.0039	.0039	.0039		
WL Seeding				.0024	.0024	.0024		
WL Shrub Plant								
Presc Burning		.0070	.0062	.0062	.0055	.0055		
Release	.0012	.0012						

Turkey - Tiak District, Hardwood

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	.0024	.0004	.0047	.0140	.0200	.0190	.0090	.5000
Inten Site Prep	.0016							
Moderate Ste Pr	.0031							
Low Inten St Pr	.0016							
Thinning			.0039	.0031	.0016			
WSI - Ovrstry			.0008	.0004				
WSI - Midstry			.0031	.0031	.0031	.0031		
WL Seeding								
WL Shrub Plant								
Presc Burning		.0039	.0031	.0031	.0024	.0024		
Release	.0012	.0012						

Quail - Main Division, Pine

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	.50	.03	.02	.02	.02	.02	.05	1.00
Inten Site Prep	.55							
Moderate Ste Pr	.50							
Low Inten St Pr	.25							
Thinning			.05	.10	.10	.10		
WSI - Ovrstry			.01	.01	.01	.01		
WSI - Midstry			.02	.03	.04	.04		
WL Seeding	9.00							9.00
WL Shrub Plant	9.00							9.00
Presc Burning		.10	.03	.04	.10	.10	.01	
Release	1.00						.01	

Quail - Main Division, Hardwood

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	.30	.01	.01	.01	.01	.01	.02	1.00
Thinning			.01	.01	.02	.02		
WSI - Ovrstry			.01	.01	.01	.01		
WSI - Midstry								
WL Seeding	9.00							9.00
WL Shrub Plant	9.00							9.00
Presc Burning								
Release								

Quail - Tiak District, Pine

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	.50	.01	.02	.02	.02	.02	.05	1.00
Inten Site Prep	.60							
Moderate Ste Pr	.50							
Low Inten St Pr	.25							
Thinning		.10	.05	.10	.10	.10		
WSI - Ovrstry		.01	.01	.01	.01	.01		
WSI - Midstry		.02	.03	.04	.04	.04		
WL Seeding	9.00							9.00
WL Shrub Plant	9.00							9.00
Presc Burning		.01	.05	.05	.10	.10	.02	
Release	1.00						.01	

Quail - Tiak District, Hardwood

Treatment	Stand Age 0-10	11-20	21-40	41-70	71-100	101+	Sngl Tree Selection	WL Opening
Base Level	.30	.01	.01	.01	.01	.01	.02	1.00
Thinning			.01	.01	.02	.02		
WSI - Ovrstry		.01	.01	.01	.01	.01		
WSI - Midstry								
WL Seeding	9.00							9.00
WL Shrub Plant	9.00							9.00
Presc Burning								
Release								

SCHABCAP-- Francis Marion-Sumter NFs

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                    PROGRAM SCHABCAP31.F77

C         The South Carolina Habitat Capability program.
C                    (Piedmont Version)


C      DCOEFS2 - number of deer per acre by working group and
C                ageclass - untreated

.180.040.010.020.020.030.030.030.030.030.030.030.030.030.030
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.020.010.010.020.020.030.030.030.030.030.030.030.030.030.030

C      DCOFT - number of additional deer per acre by working
C              group for thinning
C      DCOFB - number of additional deer per acre by working
C              group for burning
C      TCOEFS2 - number of turkey per acre by working group
C                and age class - untreated

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.010.002.005.012.025.030.040.040.040.040.040.040.040.040.040

C      TCOFT - number of additional turkey per acre by working
C              group for thinning
C      TCOFB - number of additional turkey per acre by working
C              group for burning
C      SCOEFS2 - number of squirrel per acre by working group
C                and age class - untreated

.000.000.000.000.010.010.020.030.050.070.080.100.100.100.100.100
.000.000.000.000.010.010.020.030.050.070.080.100.100.100.100.100
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.000.000.000.000.200.250.300.400.400.500.600.750.750.750.750.750

C      SCOFT - number of additional squirrel per acre by working
C              group for thinning
C      SCOFB - number of additional squirrel per acre by working
C              group for burning
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QUAIL

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.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000



C     GCOEFS - number of grouse per acre by working group and
C              age class - untreated
C     GCOFT - number of additional grouse per acre by working
C             group for thinning
C     GCOFB - number of additional grouse per acre by working
C             group for burning
C     CCOEFS - number of cavity nesters per acre by working
C              group and age class - untreated
C     MCOEFS - pounds of hard mast per acre by working group
C              and age class - untreated
C     DNCOEFS - number of dens per acre by working group and
C               age class - untreated
C     BCOEFS - pounds of browse per acre by working group and
C              age class - untreated
C     BCOEFST - pounds of browse per acre by working group and
C               age class - thinned
C     BCOEFSB - pounds of browse per acre by working group and
C               age class - burned
     *  FTYPE(7)/ 'Yellow Pine  ', 'Longleaf Pine ', 'Cove
Hardwood ',
     *            'Mixed Pine-Hwd','Upland Hdwd   ', 'Bottomland
Hwd',
     *            'Swamp Hardwood'/,
     *  SPECIE(8)/'Deer          ','Turkey
','Squirrel      ',
     *            'Quail         ','Cavity Nester ','Hard
Mast     ',
     *            'Browse        ','Dens          '/,
     *  FTSPEC

     *  CFILE(10)/  'DCOEFS2','TCOEFS2','SCOEFS2','QCOEFS',
'CCOEFS',
     *              'MCOEFS', 'BCOEFS',
'DNCOEFS','BCOEFST','BCOEFSB'/,
     *  TMENT(4)/   '       ','THINNED',' BURNED','TH & BN'/,
     *  CLASS(16)/  '    0-5','   6-10','  11-20','  21-30','
31-40',
     *              '  41-50','  51-60','  61-70','  71-80','
81-90',
     *              '
91-100','101-110','111-120','121-130','131-140',
     *              '   141+'/
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      REAL DCOFT(7)/.013,.013,.009,.012,.013,.013,.012/, !
Deer      thin
     *      DCOFB(7)/.022,.022,.016,.020,.022,.022,.020/,
!           burn
     *      TCOFT(7)/.005,.008,.002,.005,.005,.005,.002/, !
Turkey    thin
     *      TCOFB(7)/.010,.010,.010,.010,.010,.010,.010/,
!           burn
     *      SCOFT(7)/.020,.020,.020,.030,.040,.040,.040/, !
Squirrel  thin
     *      SCOFB(7)/.000,.000,.000,.000,.000,.000,.000/,
!           burn
     *      QCOFT(7)/.030,.040,.000,.025,.020,.020,.000/, !
Quail     thin
     *      QCOFB(7)/.070,.100,.000,.050,.010,.000,.000/
!           burn
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